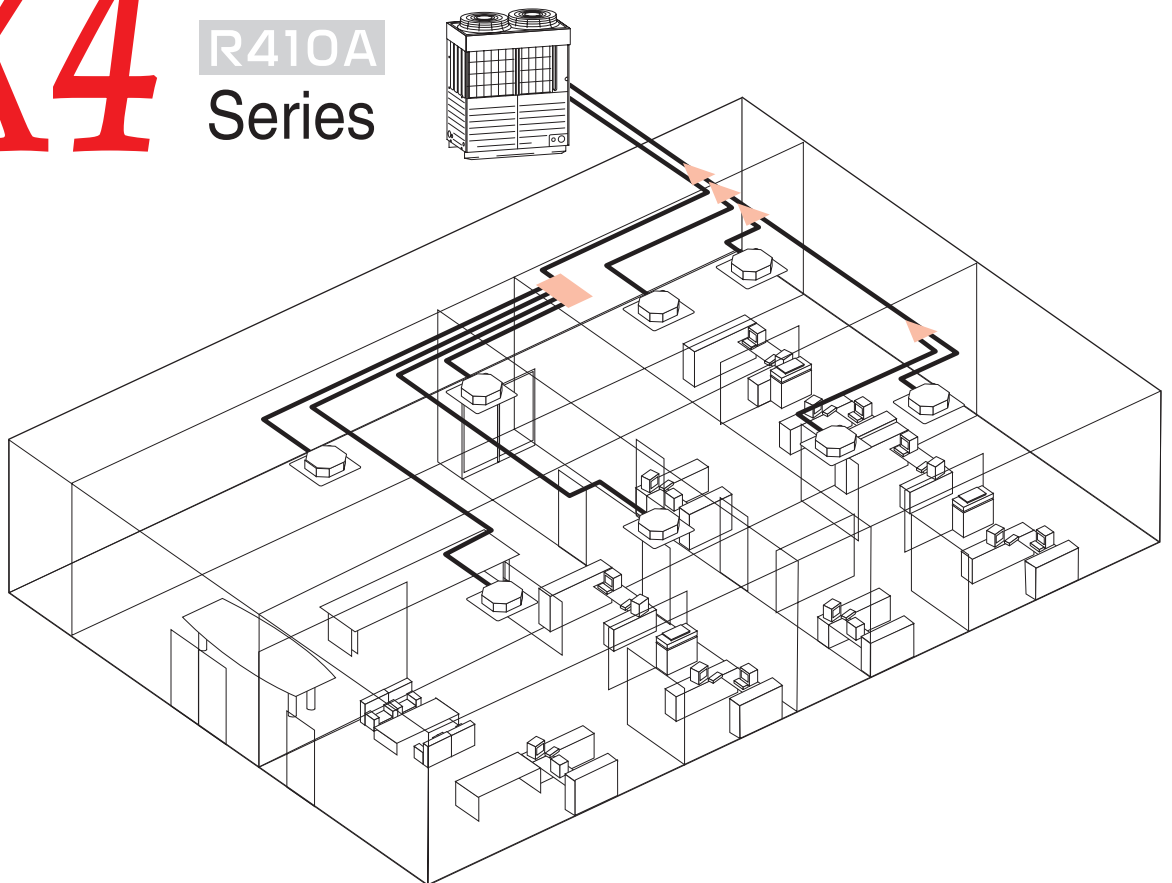


Combination Inverter Driven Multi-indoor Unit Technical Manual Collection Data

'06 Revised and Enlarged Edition

KX4

R410A
Series



5. Refrigerant Piping

5.1 Pipe Size Selection

5.1.1 Main (Outdoor unit side branching pipe – Indoor unit side first branching Pipe)

- 1) If the longest distance (measured between the outdoor unit and the farthest indoor unit) is 90m or longer (equivalent length), please change the main pipe size according to the table below.
- 2) When the capacity of the outdoor unit 1010 or more, the size of the gas pipe must be not increased, but the size of the liquid pipe must be increased as shown in the table below.

Outdoor unit	Main pipe (normal)		Pipe size for an actual length of 90m or longer	
	Gas pipe	Liquid pipe	Gas pipe	Liquid pipe
140	φ15.88 × t1.0 (Flare)	φ9.52 × t0.8 (Flare)	—	—
224	φ19.05 × t1.0 (Brazing)	φ9.52 × t0.8 (Flare)	φ22.22 × t1.0 (Brazing)	φ12.7 × t0.8 (Flare)
280	φ22.22 × t1.0 (Brazing)		φ25.4 × t1.0 (Brazing)	
335	φ25.4 × t1.0 (Brazing)	φ12.7 × t0.8 (Flare)	φ28.58 × t1.0 (Brazing)	
400			φ31.8 × t1.1 (Brazing)	
450	φ15.88 × t1.0 (Flare)			
504				
560			φ28.58 × t1.0 (Brazing)	
615				
680	φ31.8 × t1.1 (Brazing)	φ15.88 × t1.0 (Brazing)	φ19.05 × t1.0 (Brazing)	
735				
800				
850				
900		φ38.1 × t1.35 (Brazing)	φ19.05 × t1.0 (Brazing)	φ22.22 × t1.0 (Brazing)
960				
1010				
1065				
1130				
1180	φ38.1 × t1.35 (Brazing)	φ19.05 × t1.0 (Brazing)	φ22.22 × t1.0 (Brazing)	
1235				
1300				
1360				

5.1.2 Indoor unit side first branching pipe – Indoor unit side branching pipe

Please choose from the table below an appropriate pipe size as determined by the total capacity of indoor units connected downstream, provided, however, that the pipe size for this section should not exceed the main size .

Total capacity of indoor units	Gas pipe	Liquid pipe	Branch pipe set	Header pipe set	
				Model	Branches
Less than 70	φ12.70 × t1.0	φ9.52 × t0.8	DIS-22-1	HEAD 4-22-1	Max 4 branches
70 or more but less than 180	φ15.88 × t1.0				
180 or more but less than 371	φ19.05 × t1.0	φ12.7 × t0.8	DIS-180-1	HEAD 6-180-1	Max 6 branches
371 or more but less than 540	φ25.40 × t1.0	φ15.88 × t1.0	DIS-371-1	HEAD 8-371-1	Max 8 branches
540 or more but less than 700	φ28.58 × t1.0				
700 or more but less than 1100	φ31.80 × t1.1	φ19.05 × t1.0	DIS-540-1	HEAD 8-540-1	Max 8 branches
1100 or more	φ38.10 × t1.35				

5.1.3 Indoor unit side branching pipe – Indoor unit pipe

Connection pipe size for indoor units (Connecting method: Flare)

Total capacity of indoor units		Gas pipe	Liquid pipe
Indoor unit	22, 28	φ9.52 × t0.8	φ6.35 × t0.8
	36, 45, 56	φ12.7 × t0.8	
	71, 80, 90, 112, 140, 160	φ15.88 × t1.0	φ9.52 × t0.8
	224	φ19.05 × t1.0	
	280	φ22.22 × t1.0	